IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

APPEAL BRIEF FOR THE APPELLANT

Ex parte Wen-Cheng TSENG, *et al.*

**NETWORK DEVICE HAVING A FLEXIBLE EEPROM FOR SETTING CONFIGURATION SETTINGS**

Serial No. 10/805,233
Appeal No.:
Group Art Unit: 2182

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Appeal Brief

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Appellant:

Wen-Cheng TSENG, *et al.* Appeal No.:

Serial Number: 10/805,233 Group Art Unit: 2182

Filed: March 22, 2004 Examiner: Eron J. SORRELL

For: NETWORK DEVICE HAVING A FLEXIBLE EEPROM FOR SETTING CONFIGURATION SETTINGS

# BRIEF ON APPEAL

December 28, 2007

## I. INTRODUCTION

This is an appeal from the final rejection set forth in an Official Action dated June 22, 2007, finally rejecting claims 22-42, all of the claims pending in this application, as being unpatentable over U.S. Patent No. 6,407,960 to Egbert (hereinafter "Egbert") in view of U.S. Patent No. 6,035,346 to Chieng (hereinafter "Chieng"). A Request for Reconsideration was timely filed on August 7, 2007. An Advisory Action was issued on August 29, 2007, indicating that Applicants' remarks were not persuasive. A Notice of Appeal was timely filed on September 13, 2007, with a Pre-appeal Brief Request for Review. A panel decision was mailed November 29, 2007, maintaining the rejections. This Appeal Brief is being timely filed within one month of the panel decision.



## II. REAL PARTY IN INTEREST

The real party in interest in this application is BROADCOM CORPORATION of

Irvine, California by virtue of an assignment by the inventors on April 10, 2002. The assignment was recorded at Reel 012787, Frame 0130, on April 10, 2002.

## III. STATEMENT OF RELATED APPEALS AND INTERFERENCES

There are no known related appeals and/or interferences which will directly effect or be directly effected by or have a bearing on the Board's decision in this appeal.

## IV. STATUS OF CLAIMS

Claims 22-42, all of the claims pending in the present application, are the subject of this appeal. Claims 22-25, 27-32, 34-39, 41, and 42 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,407,960 to Egbert et al. (hereinafter "Egbert") in view of U.S. Patent No. 6,035,346 to Chieng et al. (hereinafter "Chieng"). Claims 26, 33, and 40 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Egbert in view of Chieng and further in view of U.S. Patent No. 5,727,207 to Gates et al. (hereinafter "Gates"). Claims 1-21 were previously cancelled.

## V. STATUS OF AMENDMENTS

Claims 22-42 are currently pending in the application. No amendments have been made after the final Office Action dated June 22, 2007. A response was filed August 7, 2007, but it did not contain any amendments.

## VI. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 22, upon which claims 23-28 are dependent, recites a method for

configuring default values of a network device (Specification, paragraph 0013). The method includes determining whether default values are obtained through a memory interface (Specification, paragraph 0013), and when it is determined that the default values are obtained through the memory interface (Specification, paragraph 0013), performing the steps of: determining from a header whether any default value of the network device should be updated (Specification, paragraph 0016), fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated (Specification, paragraphs 0013, 0014, 0016), and changing a register default value of said default values corresponding to an interpretation of at least one configuration instruction. When it is determined that the default values are obtained through a microprocessor interface (Specification, paragraph 0013), changing the default values according to data received through the microprocessor interface (Specification, paragraph 0013).

Claim 29, upon which claims 30-35 are dependent, recites a network device having default values that are flexibly configurable (Specification, paragraph 0027). The network device includes a microprocessor interface, a memory interface, and a register file containing the default values for the network device (Specification, paragraph 0015). The memory interface is configured to receive configuration instructions and the network device is configured to interpret the received configuration instructions such that the corresponding values are mapped to corresponding default values of the register file (Specification, paragraphs 0015, 0028). The network device is configurable to set default values based on data received through either the microprocessor interface and the memory interface (Specification, paragraph 0015).

Claim 36, upon which claims 37-42 are dependent, recites a network device including means for determining whether the default values are obtained through a microprocessor interface or a memory interface (Specification, paragraph 0013), means for determining from a header whether any default value of the network device should be updated (Specification, paragraph 0016), means for fetching at least one configuration instruction from the memory when the determining step determines that the network device should be updated (Specification, paragraphs 0013, 0014, 0016), means changing a register default value of said default values corresponding to an interpretation of the at least one configuration instruction, and means for changing said default values according to data received through the microprocessor interface (Specification, paragraph 0013). The means for changing the default values according to data received through the microprocessor interface is configured to change the default values when the means for determining whether the default values are obtained through a microprocessor interface or a memory interface determines that the default values are to be obtained through a microprocessor interface (Specification, paragraph 0013).

Claim 37 depends on claim 36. Claim 37 further comprises means for monitoring a reset signal to determine whether the default values of the network device should be updated (Specification, paragraph 0016).

Claim 38 depends on claim 36. Claim 38 recites a network device, wherein said means for determining from the header whether any default value of the network device should be updated comprises means for determining from the header a number of the default values of the network device that should be updated (Specification, paragraphs 0016, 0028).

Claim 39 depends on claim 38. Claim 39 recites the network device, wherein said means for fetching at least one configuration instruction from the memory comprises means for fetching a number of configuration instructions from the memory equal to the number of the default values of the network device that should be updated (Specification, paragraph 0014).

Claim 40 depends on claim 36. Claim 40 recites the network device, wherein said means for determining from the header whether any default value of the network device should be updated comprises means for determining a key value from said header and means for comparing said key value with a number pre-defined inside network device to determine whether any default value of the network device should be updated (Specification, paragraphs 0014, 0027).

Claim 41 depends on claim 36. Claim 41 recites the network device, wherein said at least one configuration instruction comprises a plurality of configuration instructions and the means for fetching at least one configuration instruction from the memory is configured to repeatedly fetch configuration instructions until all of the plurality of configuration instructions have been fetched (Specification, paragraphs 0014, 0028).

Claim 42 depends on claim 36. Claim 42 recite the network device, wherein said means for receiving a header from a memory through the memory interface comprises means for receiving a header from an EEPROM through an EEPROM interface (Specification, paragraph 0016).

## VII. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal are the rejections of claims

22-25, 27-32, 34-39, 41, and 42 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,407,960 to Egbert in view of U.S. Patent No. 6,035,346 to Chieng, and the rejections of claims 26, 33, and 40 under 35 U.S.C. §103(a) as allegedly being unpatentable over Egbert in view of Chieng and further in view of Gates.

## VIII. APPELLANT'S ARGUMENTS

Appellants respectfully submit that each of pending claims 22-42 recite subject matter that is not taught, disclosed, or suggested in the cited art. Each of the claims being argued separately, and thus, each of the claims stands or falls alone.

## A. Rejection of Claims 22-25, 27-32, 34-39, 41, and 42 under 35 U.S.C. §103(a)

Claims 22-25, 27-32, 34-39, 41, and 42 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,407,960 to Egbert in view of U.S. Patent No. 6,035,346 to Chieng. The Office Action took the position that Egbert discloses all of the elements of the claims, with the exception of "when it is determined that the default values are obtained through a microprocessor interface, changing said default values according to data received through the microprocessor interface." The Office Action then cited Chieng as allegedly disclosing this limitation of the claims. Appellants respectfully traverse this rejection and request that it be reversed.

### 1) Claim 22

Claim 22, upon which claims 23-28 are dependent, recites a method for configuring default values of a network device. The method includes determining whether default values are obtained through a memory interface, and when it is determined that the default values are obtained through the memory interface, performing the steps of: determining from a header whether any default value of the network device should be updated, fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated, and changing a register default value of said default values corresponding to an interpretation of at least one configuration instruction. When it is determined that the default values are obtained through a microprocessor interface, changing the default

values according to data received through the microprocessor interface.

Thus, embodiments of the present invention are directed, in part, to providing system integrators a dynamic configuration using a low cost EEPROM. With this approach, system integrators will have flexibility to change the default values of all configurable registers inside a network device, such as switch/hub chip or components on a PC board. A network device will be able to update configuration setting either through the low cost EEPROM or through a microprocessor interface.

Appellants respectfully submit that claim 22 recites subject matter which is neither disclosed nor suggested by the combination of Egbert and Chieng.

Egbert generally describes a method by the external memory interface 16 of storing register data values in selected device registers 12. The external memory interface 16 initiates reading of the external memory 14 in step 50 following a detected reset condition on the device 10 and in response to detection of the external memory device 14 by the memory sensor 18. In particular, the external memory interface 16 begins reading the first memory location of the external memory 14, which corresponds to an even-numbered location 26. The address decoder logic 22 reads the register address value from the even memory location 26 in step 52, and determines in step 54 whether the most significant bit of the register address value is set to 1.

Chieng generally describes a method for reprogramming boot instructions in an adapter card in a computer system. Specifically, by allowing a host processor to control an intelligent Peripheral Component Interface device's reset logic, the PCI device's programmable read only memory can be reprogrammed without storing any reprogramming instructions in the PROM itself. During reprogramming operations the

host processor commands the PCI device into a reset-and-hold mode. During this time the host processor downloads reprogramming instructions and replacement code into the PCI's random access memory. When released from reset, the PCI device executes the reprogramming code downloaded by the host processor.

As set forth in MPEP 2143, "To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." Because the combination of references fails to teach or suggest all the claim limitations, the rejection of claim 22 is not a prima facie rejection, and consequently should be reversed.

Appellants submit that the final Office Action has failed to establish a prima facie case of obviousness as the combination of Egbert and Chieng fails to disclose each and every element of claim 22. For example, the combination of Egbert and Chieng fails to disclose or suggest "determining from a header whether any default value of the network device should be updated and fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated," as recited in claim 22.

The final Office Action took the position that column 3, lines 31-42, of Egbert discloses "determining from a header whether any default value of the network device should be updated and fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated."

However, Appellants respectfully submit that Egbert merely discloses reading of register address value from the even memory location 26, and determining of the most significant bit of the address value set to 1.

Furthermore, Egbert and Chieng fail to disclose or suggest "determining from a header whether any default value of the network device should be updated, and fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated, and changing a register default value of said default values corresponding to an interpretation of at least one configuration instruction," as recited in claim 22. Instead, the method of Egbert merely reads a register address value from an external memory. In fact, there is no teaching or suggestion in Egbert of any steps of determining whether any value of the network device should be updated.

Therefore, Appellants respectfully submit that the combination of Egbert and Chieng fails to disclose or suggest "determining from a header whether any default value of the network device should be updated and fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated," as recited in claim 22. The combination of Egbert and Chieng also fails to disclose or suggest "determining from a header whether any default value of the network device should be updated, and fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated, and changing a register default value of said default values corresponding to an interpretation of at least one configuration instruction," as recited in claim 22. Thus, Appellants respectfully submit that the combination of Egbert and Chieng fails to disclose

or suggest all of the elements of claim 22. Accordingly, it is respectfully requested that the rejection be reversed and withdrawn.

**2) Claim 29**

Claim 29, upon which claims 30-35 are dependent, recites a network device having default values that are flexibly configurable. The network device includes a microprocessor interface, a memory interface, and a register file containing the default values for the network device. The memory interface is configured to receive configuration instructions and the network device is configured to interpret the received configuration instructions such that the corresponding values are mapped to corresponding default values of the register file. The network device is configurable to set default values based on data received through either the microprocessor interface and the memory interface.

Appellants respectfully submit that claim 29 recites subject matter which is neither disclosed nor suggested by the combination of Egbert and Chieng.

Egbert generally describes a method by the external memory interface 16 of storing register data values in selected device registers 12. The external memory interface 16 initiates reading of the external memory 14 in step 50 following a detected reset condition on the device 10 and in response to detection of the external memory device 14 by the memory sensor 18. In particular, the external memory interface 16 begins reading the first memory location of the external memory 14, which corresponds to an even-numbered location 26. The address decoder logic 22 reads the register address value from the even memory location 26 in step 52, and determines in step 54 whether the most significant bit of the register address value is set to 1.

Chieng generally describes a method for reprogramming boot instructions in an adapter card in a computer system. Specifically, by allowing a host processor to control an intelligent Peripheral Component Interface device's reset logic, the PCI device's programmable read only memory can be reprogrammed without storing any reprogramming instructions in the PROM itself. During reprogramming operations the host processor commands the PCI device into a reset-and-hold mode. During this time the host processor downloads reprogramming instructions and replacement code into the PCI's random access memory. When released from reset, the PCI device executes the reprogramming code downloaded by the host processor.

As set forth in MPEP 2143, "To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." Because the combination of references fails to teach or suggest all the claim limitations, the rejection of claim 29 is not a prima facie rejection, and consequently should be reversed.

Appellants submit that the final Office Action has failed to establish a prima facie case of obviousness as the combination of Egbert and Chieng fails to disclose each and every element of claim 29. For example, the combination of Egbert and Chieng fails to disclose or suggest "wherein the configuration instruction interpreter is configured to interpret the received configuration instructions such that the corresponding values are mapped corresponding default values of the register file," as recited in claim 29.

The Office Action also took the position that Egbert teaches the network device including a memory interface that receives configuration instructions and the addresses read from the external memory are mapped to the register file in the network device. The Office Action also took the position that Egbert teaches the network device that reads the internal memory and interprets what registers to reprogram and what data to reprogram the device with. Applicants respectfully disagree with the Office Action's position.

Rather, Egbert teaches that specifying the destination device registers 12 for storage of respective register data values stored in odd-numbered memory locations 28 within the external memory 14. See column, lines 38-42. Egbert merely discloses that the register values specify the destination device registers. Therefore, Egbert fails to teach or suggest, at least, "the network device is configured to interpret the received configuration instructions such that the corresponding values are mapped to corresponding default values of the register file, and wherein the network device is configurable to set default values based on data received through either the microprocessor interface and the memory interface," as recited in independent claim 29.

Therefore, Appellants respectfully submit that the combination of Egbert and Chieng fails to disclose or suggest "the network device is configured to interpret the received configuration instructions such that the corresponding values are mapped to corresponding default values of the register file, and wherein the network device is configurable to set default values based on data received through either the microprocessor interface and the memory interface," as recited in claim 29. Thus, Appellants respectfully submit that the combination of Egbert and Chieng fails to disclose or suggest all of the elements of claim 29. Accordingly, it is respectfully requested that

the rejection be reversed and withdrawn.

**3) Claim 36**

Claim 36, upon which claims 37-42 are dependent, recites a network device including means for determining whether the default values are obtained through a microprocessor interface or a memory interface, means for determining from a header whether any default value of the network device should be updated, means for fetching at least one configuration instruction from the memory when the determining step determines that the network device should be updated, means changing a register default value of said default values corresponding to an interpretation of the at least one configuration instruction, and means for changing said default values according to data received through the microprocessor interface. The means for changing the default values according to data received through the microprocessor interface is configured to change the default values when the means for determining whether the default values are obtained through a microprocessor interface or a memory interface determines that the default values are to be obtained through a microprocessor interface.

Thus, certain embodiments of the present invention are directed, in part, to provide system integrators a dynamic configuration using a low cost EEPROM. With this approach, system integrators will have flexibility to change the default values of all configurable registers inside a network device, such as switch/hub chip or components on a PC board. A network device will be able to update configuration setting either through the low cost EEPROM or through a microprocessor interface.

Appellants respectfully submit that claim 22 recites subject matter that is neither disclosed nor suggested by the combination of Egbert and Chieng.

Egbert generally describes a method by the external memory interface 16 of storing register data values in selected device registers 12. The external memory interface 16 initiates reading of the external memory 14 in step 50 following a detected reset condition on the device 10 and in response to detection of the external memory device 14 by the memory sensor 18. In particular, the external memory interface 16 begins reading the first memory location of the external memory 14, which corresponds to an even-numbered location 26. The address decoder logic 22 reads the register address value from the even memory location 26 in step 52, and determines in step 54 whether the most significant bit of the register address value is set to 1.

Chieng generally describes a method for reprogramming boot instructions in an adapter card in a computer system. Specifically, by allowing a host processor to control an intelligent Peripheral Component Interface device's reset logic, the PCI device's programmable read only memory can be reprogrammed without storing any reprogramming instructions in the PROM itself. During reprogramming operations the host processor commands the PCI device into a reset-and-hold mode. During this time the host processor downloads reprogramming instructions and replacement code into the PCI's random access memory. When released from reset, the PCI device executes the reprogramming code downloaded by the host processor.

As set forth in MPEP 2143, "To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references

when combined) must teach or suggest all the claim limitations." Because the combination of references fails to teach or suggest all the claim limitations, the rejection of claim 36 is not a prima facie rejection, and consequently should be reversed.

Appellants submit that the final Office Action has failed to establish a prima facie case of obviousness as the combination of Egbert and Chieng fails to disclose each and every element of claim 36. For example, the combination of Egbert and Chieng fails to disclose or suggest "means for determining whether the default values are obtained through a microprocessor interface or a memory interface, means for determining from a header whether any default value of the network device should be updated, means for fetching at least one configuration instruction from the memory when the determining step determines that the network device should be updated," as recited in claim 36.

The final Office Action took the position that column 3, lines 31-42, of Egbert discloses "determining from a header whether any default value of the network device should be updated and fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated." However, Appellants respectfully submit that Egbert merely discloses reading of register address value from the even memory location 26, and determining of the most significant bit of the address value set to 1.

Furthermore, Egbert and Chieng fail to disclose or suggest "means for determining whether the default values are obtained through a microprocessor interface or a memory interface, means for determining from a header whether any default value of the network device should be updated, means for fetching at least one configuration instruction from the memory when the determining step determines that the network device should be

updated," as recited in claim 36. Instead, the method of Egbert merely reads a register address value from an external memory. In fact, there is no teaching or suggestion in Egbert that any steps of determining whether any value of the network device should be updated.

Therefore, Appellants respectfully submit that the combination of Egbert and Chieng fails to disclose or suggest "means for determining whether the default values are obtained through a microprocessor interface or a memory interface, means for determining from a header whether any default value of the network device should be updated, means for fetching at least one configuration instruction from the memory when the determining step determines that the network device should be updated," as recited in claim 36. The combination of Egbert and Chieng also fails to disclose or suggest "means for determining whether the default values are obtained through a microprocessor interface or a memory interface, means for determining from a header whether any default value of the network device should be updated, means for fetching at least one configuration instruction from the memory when the determining step determines that the network device should be updated," as recited in claim 36. Thus, Appellants respectfully submit that the combination of Egbert and Chieng fails to disclose or suggest all of the elements of claim 36. Accordingly, it is respectfully requested that the rejection be reversed and withdrawn.

**4) Claim 23**

Appellants respectfully submit that the combination of Egbert and Chieng fails to disclose or suggest "monitoring a reset signal to determine whether the default values of the network device should be updated," as recited in claim 23. The final Office Action

took the position that column 3, lines 43-60, of Egbert discloses this feature. However, Egbert does not disclose "monitoring a reset signal to determine whether the default values of the network device should be updated." Chieng also fails to disclose this feature, and thus fails to cure the deficiencies of Egbert. Therefore, the combination of Egbert and Chieng does not disclose or suggest all of the elements of claim 23. Thus, the rejection of claim 23 should be reversed.

Furthermore, claim 23 is dependent upon claim 22, and recites further limitations. Thus, claim 23 is patentable at least for the reasons claim 22 is patentable, and also because claim 23 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**5) Claim 24**

Claim 24 is dependent upon claim 22, and recites further limitations. Thus, claim 24 is patentable at least for the reasons claim 22 is patentable, and also because claim 24 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**6) Claim 25**

Claim 25 is dependent upon claim 22, and recites further limitations. Thus, claim 25 is patentable at least for the reasons claim 22 is patentable, and also because claim 25 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**7) Claim 27**

Claim 27 is dependent upon claim 22, and recites further limitations. Thus, claim 27 is patentable at least for the reasons claim 22 is patentable, and also because claim

27 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**8) Claim 28**

Claim 28 is dependent upon claim 22, and recites further limitations. Thus, claim 28 is patentable at least for the reasons claim 22 is patentable, and also because claim 28 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**9) Claim 30**

Appellants respectfully submit that the combination of Egbert and Chieng fails to disclose or suggest "wherein said network device is configured to monitor a reset signal to determine if the default values should be updated," as recited in claim 30. The final Office Action took the position that column 3, lines 43-60, of Egbert discloses this feature. However, Egbert does not disclose "wherein said network device is configured to monitor a reset signal to determine if the default values should be updated." Chieng also fails to disclose this feature, and thus fails to cure the deficiencies of Egbert. Therefore, the combination of Egbert and Chieng does not disclose or suggest all of the elements of claim 30. Thus, the rejection of claim 30 should be reversed.

Furthermore, claim 30 is dependent upon claim 29, and recites further limitations. Thus, claim 30 is patentable at least for the reasons claim 29 is patentable, and also because claim 30 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**10) Claim 31**

Claim 31 is dependent upon claim 29, and recites further limitations. Thus, claim

31 is patentable at least for the reasons claim 29 is patentable, and also because claim 31 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**11) Claim 32**

Claim 32 is dependent upon claim 29, and recites further limitations. Thus, claim 32 is patentable at least for the reasons claim 29 is patentable, and also because claim 32 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**12) Claim 34**

Claim 34 is dependent upon claim 29, and recites further limitations. Thus, claim 34 is patentable at least for the reasons claim 29 is patentable, and also because claim 34 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**13) Claim 35**

Claim 35 is dependent upon claim 29, and recites further limitations. Thus, claim 35 is patentable at least for the reasons claim 29 is patentable, and also because claim 35 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**14) Claim 37**

Appellants respectfully submit that the combination of Egbert and Chieng fails to disclose or suggest "monitoring a reset signal to determine whether the default values of the network device should be updated," as recited in claim 37. The final Office Action

took the position that column 3, lines 43-60, of Egbert discloses this feature. However, Egbert does not disclose "monitoring a reset signal to determine whether the default values of the network device should be updated." Chieng also fails to disclose this feature, and thus fails to cure the deficiencies of Egbert. Therefore, the combination of Egbert and Chieng does not disclose or suggest all of the elements of claim 37. Thus, the rejection of claim 37 should be reversed.

Furthermore, claim 37 is dependent upon claim 36, and recites further limitations. Thus, claim 37 is patentable at least for the reasons claim 36 is patentable, and also because claim 37 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**15) Claim 38**

Claim 38 is dependent upon claim 36, and recites further limitations. Thus, claim 38 is patentable at least for the reasons claim 36 is patentable, and also because claim 38 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**16) Claim 39**

Claim 39 is dependent upon claim 36, and recites further limitations. Thus, claim 39 is patentable at least for the reasons claim 36 is patentable, and also because claim 39 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**17) Claim 41**

Claim 41 is dependent upon claim 36, and recites further limitations. Thus, claim 41 is patentable at least for the reasons claim 36 is patentable, and also because claim

41 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**18) Claim 42**

Claim 42 is dependent upon claim 36, and recites further limitations. Thus, claim 42 is patentable at least for the reasons claim 36 is patentable, and also because claim 42 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**B. Rejection of claims 26, 33, and 40 were rejected under 35 U.S.C. §103(a)**

In the final Office Action, claims 26, 33, and 40 were rejected under 35 §103(a) as being unpatentable over Egbert in view of Chieng and further in view of Gates. The Office Action took the position that Egbert and Chieng disclose all of the elements of the claims, with the exception of "determining a key value from the header and comparing the key value with a magic number predefined inside the network device to determine whether any default value of the network device should be updated." The Office Action then cited Gates as allegedly disclosing this limitation of the claims. Appellants submit that each of claims 26, 33, and 40 recite subject matter that is not disclosed or suggested by the combination of Egbert, Chieng, and Gates. Thus, Appellants respectfully traverse this rejection and request that it be reversed.

**1) Claim 26**

Appellants respectfully submit that Gates fails to cure the deficiencies in Egbert and Chieng, and further fails to disclose all of the elements of independent claim 22 from which claim 26 depends. Gates generally describes a method and apparatus for automatically loading configuration data on reset into a host adapter integrated circuit. Specifically, configuration data indicative of interface requirements for interfacing to a host adapter card are automatically serially loaded on reset from an external device on the card into host adapter integrated circuit on the card. A driver program can then read the configuration data from the host adapter integrated circuit and thereby determine how to interface with the host adapter card.

As discussed above, the combination of Egbert and Chieng fails to disclose or suggest all of the elements of independent claim 22. Moreover, Gates does not cure the deficiencies in Egbert and Chieng with respect to independent claim 22. The method of Gates does not determine a key value from a header and compare the key value with a predefined in the network device. Gates fails to disclose or suggest such determination and comparison steps. As such, the combination of Egbert, Chieng and Gates also fails to disclose or suggest all of the elements of claim 22. Thus, the rejection of claim 26 should be reversed.

As set forth in MPEP 2143.01, "obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art." The Office Action's proposed motivation is not found in the references themselves, nor in the knowledge generally available to one of ordinary skill in the art. It is, therefore,

respectfully submitted that the rejection does not provide a prima facie basis for asserting obviousness, and it is respectfully requested that the rejection be reversed.

Furthermore, claim 26 is dependent upon claim 22, and recites further limitations. Thus, claim 26 is patentable at least for the reasons claim 22 is patentable, and also because claim 26 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**2) Claim 33**

Appellants respectfully submit that Gates fails to cure the deficiencies in Egbert and Chieng, and further fails to disclose all of the elements of independent claim 29 from which claim 33 depends. Gates generally describes a method and apparatus for automatically loading configuration data on reset into a host adapter integrated circuit. Specifically, configuration data indicative of interface requirements for interfacing to a host adapter card are automatically serially loaded on reset from an external device on the card into host adapter integrated circuit on the card. A driver program can then read the configuration data from the host adapter integrated circuit and thereby determine how to interface with the host adapter card.

As discussed above, the combination of Egbert and Chieng fails to disclose or suggest all of the elements of independent claim 29. Moreover, Gates does not cure the deficiencies in Egbert and Chieng with respect to independent claim 29. The method of Gates does not determine a key value from a header and compare the key value with a predefined in the network device. Gates fails to disclose or suggest such determination and comparison steps. As such, the combination of Egbert, Chieng and Gates also fails to disclose or suggest all of the elements of claim 29. Thus, the rejection of claim 33

should be reversed.

As set forth in MPEP 2143.01, "obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art." The Office Action's proposed motivation is not found in the references themselves, nor in the knowledge generally available to one of ordinary skill in the art. It is, therefore, respectfully submitted that the rejection does not provide a prima facie basis for asserting obviousness, and it is respectfully requested that the rejection be reversed.

Claim 33 is dependent upon claim 29, and recites further limitations. Thus, claim 33 is patentable at least for the reasons claim 29 is patentable, and also because claim 33 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

**3) Claim 40**

Appellants respectfully submit that Gates fails to cure the deficiencies in Egbert and Chieng, and further fails to disclose all of the elements of independent claim 36 from which claim 40 depends. Gates generally describes a method and apparatus for automatically loading configuration data on reset into a host adapter integrated circuit. Specifically, configuration data indicative of interface requirements for interfacing to a host adapter card are automatically serially loaded on reset from an external device on the card into host adapter integrated circuit on the card. A driver program can then read the configuration data from the host adapter integrated circuit and thereby determine how to interface with the host adapter card.

As discussed above, the combination of Egbert and Chieng fails to disclose or suggest all of the elements of independent claim 36. Moreover, Gates does not cure the deficiencies in Egbert and Chieng with respect to independent claim 36. The method of Gates does not determine a key value from a header and compare the key value with a predefined in the network device. Gates fails to disclose or suggest such determination and comparison steps. As such, the combination of Egbert, Chieng and Gates also fails to disclose or suggest all of the elements of claim 36. Thus, the rejection of claim 40 should be reversed.

As set forth in MPEP 2143.01, "obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art." The Office Action's proposed motivation is not found in the references themselves, nor in the knowledge generally available to one of ordinary skill in the art. It is, therefore, respectfully submitted that the rejection does not provide a prima facie basis for asserting obviousness, and it is respectfully requested that the rejection be reversed.

Furthermore, Appellants respectfully submit that the combination of Egbert, Chieng, and Gates fails to disclose or suggest "wherein said means for determining from the header whether any default value of the network device should be updated comprises means for determining a key value from said header and means for comparing said key value with a number pre-defined inside network device to determine whether any default value of the network device should be updated," as recited in claim 40. The final Office Action took the position that column 2, of Gates discloses this feature. However, Gates

does not disclose "wherein said means for determining from the header whether any default value of the network device should be updated comprises means for determining a key value from said header and means for comparing said key value with a number pre-defined inside network device to determine whether any default value of the network device should be updated." On page 8, the final Office Action acknowledged that Chieng and Egbert fail to disclose this feature. Therefore, the combination of Egbert, Chieng, and Gates does not disclose or suggest all of the elements of claim 40. Thus, the rejection of claim 40 should be reversed.

Claim 40 is dependent upon claim 36, and recites further limitations. Thus, claim 40 is patentable at least for the reasons claim 36 is patentable, and also because claim 40 recites additional limitations. Thus, it is respectfully requested that this rejection be reversed and withdrawn.

For all of the above noted reasons, it is strongly contended that certain clear differences exist between the present invention as claimed in claims 22-42 and the prior art relied upon by the Examiner. It is further contended that these differences are more than sufficient that the present invention would not have been obvious to a person having ordinary skill in the art at the time the invention was made.

This final rejection being in error, therefore, it is respectfully requested that this honorable Board of Patent Appeals and Interferences reverse the Examiner's decision in this case and indicate the allowability of application claims 22-42.

In the event that this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together

with any additional fees which may be due with respect to this paper may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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Encls: Appendix 1 - Claims on Appeal
Appendix 2 - Evidence
Appendix 3 - Related Proceedings

APPENDIX 1

**CLAIMS ON APPEAL**

22. (Previously Presented) A method for configuring default values of a network device, comprising:

determining whether default values are obtained through a memory interface,

when it is determined that the default values are obtained through the memory interface, performing the steps of,

determining from a header whether any default value of the network device should be updated;

fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated; and

changing a register default value of said default values corresponding to an interpretation of at least one configuration instruction; and

when it is determined that the default values are obtained through a microprocessor interface, changing said default values according to data received through the microprocessor interface.

23. (Previously Presented) The method according to claim 22, wherein said method further comprises monitoring a reset signal to determine whether the default values of the network device should be updated.

24. (Previously Presented) The method according to claim 22, wherein said step of determining from the header whether any default value of the network device should

be updated comprises determining from the header a number of the default values of the network device that should be updated.

25. (Previously Presented) The method according to claim 24, wherein said step of fetching at least one configuration instruction from the memory comprises fetching a number of configuration instructions from the memory equal to the number of the default values of the network device that should be updated.

26. (Previously Presented) The method according to claim 22, wherein said step of determining from the header whether any default value of the network device should be updated comprises determining a key value from said header and comparing said key value with a number pre-defined inside network device to determine whether any default value of the network device should be updated.

27. (Previously Presented) The method according to claim 22, wherein said at least one configuration instruction comprises a plurality of configuration instructions and the step of fetching at least one configuration instruction from the memory is repeated until all of the plurality of configuration instructions have been fetched.

28. (Previously Presented) The method according to claim 22, wherein said memory interface comprises an EEPROM interface and the method further comprises a step of receiving a header from an EEPROM through the EEPROM interface.

29. (Previously Presented) A network device, having default values that are flexibly configurable, comprising:

a microprocessor interface;

a memory interface; and

a register file containing the default values for the network device;

wherein the memory interface is configured to receive configuration instructions, wherein the network device is configured to interpret the received configuration instructions such that the corresponding values are mapped to corresponding default values of the register file, and wherein the network device is configurable to set default values based on data received through either the microprocessor interface and the memory interface.

30. (Previously Presented) The network device according to claim 29, wherein said network device is configured to monitor a reset signal to determine if the default values should be updated.

31. (Previously Presented) The network device according to claim 29, wherein said network device is configured to determine from a header a number of the default values of the network device that should be updated.

32. (Previously Presented) The network device according to claim 31, wherein said network device is configured to fetch a number of configuration instructions from the memory equal to the number of the default values of the network device that should be

updated.

33. (Previously Presented) The network device according to claim 29, wherein the network device is configured to receive a header from the memory interface containing a key value from and configured to compare said key value with a pre-defined number to determine whether any default value of said default values should be updated.

34. (Previously Presented) The network device according to claim 29, further comprising a controller for setting one of the microprocessor interface and the memory interface through which data is received to change the default values.

35. (Previously Presented) The network device according to claim 29, wherein said memory interface comprises an EEPROM interface and the EEPROM interface is configured to receive configuration instructions from an EEPROM.

36. (Previously Presented) A network device, comprising:

means for determining whether the default values are obtained through a microprocessor interface or a memory interface;

means for determining from a header whether any default value of the network device should be updated;

means for fetching at least one configuration instruction from the memory when the determining step determines that the network device should be updated;

means changing a register default value of said default values corresponding to an

interpretation of the at least one configuration instruction; and

means for changing said default values according to data received through the microprocessor interface;

wherein said means for changing said default values according to data received through the microprocessor interface is configured to change the default values when the means for determining whether the default values are obtained through a microprocessor interface or a memory interface determines that the default values are to be obtained through a microprocessor interface.

37. (Previously Presented) The network device according to claim 36, further comprises means for monitoring a reset signal to determine whether the default values of the network device should be updated.

38. (Previously Presented) The network device according to claim 36, wherein said means for determining from the header whether any default value of the network device should be updated comprises means for determining from the header a number of the default values of the network device that should be updated.

39. (Previously Presented) The network device according to claim 38, wherein said means for fetching at least one configuration instruction from the memory comprises means for fetching a number of configuration instructions from the memory equal to the number of the default values of the network device that should be updated.

40. (Previously Presented) The network device according to claim 36, wherein said means for determining from the header whether any default value of the network device should be updated comprises means for determining a key value from said header and means for comparing said key value with a number pre-defined inside network device to determine whether any default value of the network device should be updated.

41. (Previously Presented) The network device according to claim 36, wherein said at least one configuration instruction comprises a plurality of configuration instructions and the means for fetching at least one configuration instruction from the memory is configured to repeatedly fetch configuration instructions until all of the plurality of configuration instructions have been fetched.

42. (Previously Presented) The network device according to claim 36, wherein said means for receiving a header from a memory through the memory interface comprises means for receiving a header from an EEPROM through an EEPROM interface.

APPENDIX 2

## EVIDENCE APPENDIX

No evidence under section 37 C.F.R. 1.130, 1.131, or 1.132 has been entered or will be relied upon by Appellants in this appeal.

APPENDIX 3

## RELATED PROCEEDINGS APPENDIX

No decisions of the Board or of any court have been identified under 37 C.F.R. §41.37(c)(1)(ii).